

NEW 1967
PRODUCT
SHORT
FORM!



KORAD K-IQP

KORAD UNION CARBIDE **LASERS**
and LASER ACCESSORY EQUIPMENT



PICK A **KORAD** LASER...FOR THE EXACT FREQUENCY, ENERGY AND PULSE MODE AND ALSO LOOK AT THESE VERSATILE PRACTICAL INVESTMENTS FOR YOUR



Medium Power Lasers

Model K-1. An excellent basic laser for equipping a new laboratory for laser studies. All K-1 series lasers operate at room temperature, are completely modular, for growth into giant pulse or higher power laser systems. 15 to 35 joules. Converts in minutes to a K1Q Giant Pulse Laser.



High Power Lasers

Model K-2. When 35 to 150 joules of laser radiation are desired, these lasers deliver. Same modular concept as the K-1 series, but with higher capacitance energy bank, larger ruby crystals. Start at 35 joules and add joules or Q-Switching later if desired.



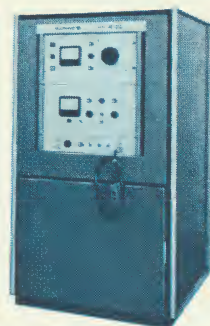
250 Watt CW Gas Lasers

Model K-G4. High power 10.6 micron CW laser radiation. Similar to the K-G3 but with a longer fixed cavity and greater power output. Completely self contained in a control console plus laser head. Push button operation. Requires only 208 volt, 60 cycle power.



Medium Power Giant Pulse Lasers

Model K-1Q. Delivering 75 to 200 Megawatts, these Giant Pulse Lasers utilize the Korad Pockels Cell active Q-Switch in the optical cavity of a K-1 laser to raise peak power output and shorten the pulse width. Operation without Q-Switch is easy when conventional mode is desired. Fully Modular.



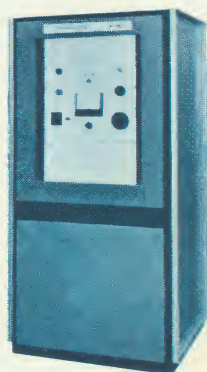
High Power Giant Pulse Lasers

Model K-2Q. Delivering 500-750 Megawatts of Q-Switched Giant Pulse power, these powerful lasers utilize a 10,000 volt power supply. Your choice of Q-Switches, but Korad recommends the K-QS2 Active Pockels Cell for optimum line width and reliability. The K-2Q is fully modular.



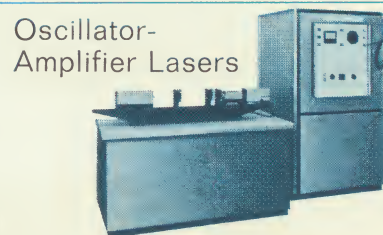
90 Watt CW CO₂ Lasers

Model K-G3. Push button operation makes these 90 watt gas lasers extremely easy to use. Completely self contained. Material temperatures exceed 3000° C. Radiation is 10.6 microns quasi-CW, adjustable from 0 to 90 watts. A clean source of infrared heat.



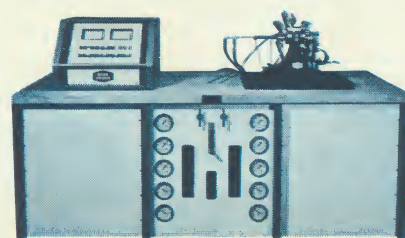
High Rep Rate Lasers

Model K-15. Lasers that may be pulsed at rates faster than once per minute. 20 Watts average power. The standard K-15 delivers 60 pulses per minute. Other high rep rate lasers are available with Nd doped materials with outputs up to 100 pulses per second. Modular design for laser lab growth.



Oscillator-Amplifier Lasers

Model K-1500. Extreme brightness is achieved using selected ruby crystals for peak power outputs up to 1.1 gigawatts. Brightness of up to 2.5×10^{14} watts/cm²/steradian. Beam divergence down to 0.7 milliradian half-angle. These lasers produce 6943Å laser radiation with less than 0.1Å line width per spectral component.

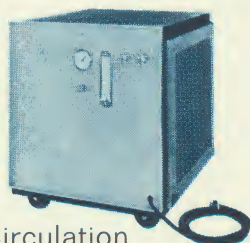


1.06 Microns CW Yag Lasers

Model K-Y100 Laser with more than 100 watts of continuous wave laser radiation at room temperature. Uses Vortex Arc for laser pump. Model K-Y1 portable laser emits ¼ watt CW. Operates at room temperature from 115 volt a.c. wall outlet. Laser head weighs only 4 pounds.

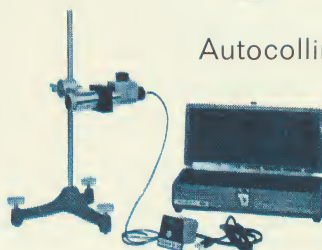
CT POWER, DE YOU WANT... LASER ACCESSORIES... LASER LAB.

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Water Circulation Systems

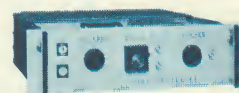
Model K-WC. Four different cooling systems are available to cool 500 to 5000 Watts. Temperature ranges of from 40° to 120°F regulate to optimum operating temperature for the laser head. Deionizers included. These cooling units extend flash lamp and laser rod life.



Autocollimators

Model K-AM. Completely self-contained autocollimators which provide for maximizing laser output. Particularly useful for optimizing the laser optical cavity for single mode operation. Less than two pounds in weight, the mini-autocollimator comes complete with carrying case, power supply, light source. Easy to use.

Active Q-Switches



Model K-QS2. Available for Ruby or Neodymium doped laser rods, these active Q-Switches convert conventional mode lasers into Giant Pulse lasers. Switches use Pockels cells, polarizers, high speed shutter electronic circuitry for low jitter and No pre-lasing, post-lasing or stimulated Raman effect.



Custom Systems & Military Systems

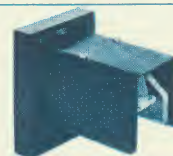
Recent military laser systems developed by Korad include portable range finders, underwater lasers and powerful multi-stage oscillator amplifiers. Custom packaging of standard products or development of entirely new laser systems can be arranged.



Frequency Multipliers

Model K-M. Use of a frequency doubler immediately doubles the versatility of your Ruby or Neodymium crystal laser by converting laser radiation to a new frequency. Use in tandem or with K-R Raman Cells, for many wave lengths.

Passive Q-Switches



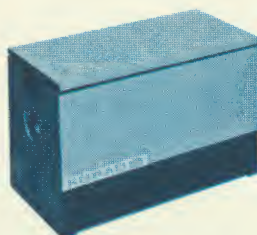
Model K-QS1. Bleachable absorber type. Extremely economical, these passive switches convert conventional lasers into Giant Pulse lasers without external circuits. The laser beam itself triggers the Q-Switch dye solution and causes the Giant Pulse activity. A good choice for a low cost system.



Laser Spot Finders

Model K-FV. These alignment instruments allow the laser operator to predict the precise

location of focused laser energy. 5 cm to 100 cm focal length. Up to 200 Megawatts per cm² power. Only one test shot is necessary using a spot finder. One inch aperture.



Raman Cells

Model K-R. Self-contained units which, when placed in the laser optical cavity, convert basic ruby or neodymium radiation into stimulated Raman radiation of a different wave length. Can be used with or without K-M frequency doubler and with various Raman elements to obtain scores of wavelengths.

Laser Detectors

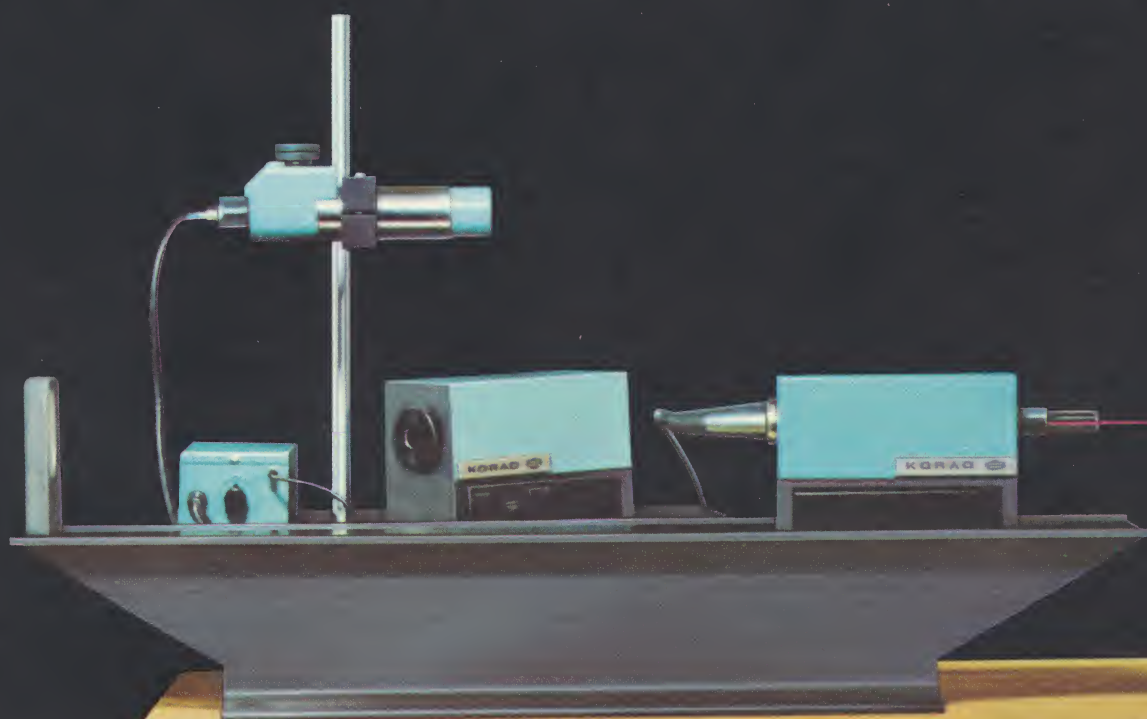


Model K-D1. Photon-resistive transducers that convert laser radiation into voltage. Especially valuable for monitoring giant pulse laser operation. 0.3 nanosecond response time. The K-D1 measures peak power and total energy simultaneously, is useful in a variety of applications.



Calorimeters

Model K-J. Featuring $\pm 3\%$ accuracy, these "permanently calibrated" precision calorimeters measure laser energy. Accuracy is maintained at very high power levels. Available in three basic models for medium, high and very high power density, 580 megawatts/cm².



KORAD



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